**TAG #1 –WUTC TAG Meeting**

**Date & time:** 04/15/2020, 9:00 to 11:20 AM

**Location:** Skype Meeting

**Presenters:** Brian Robertson, Devin McGreal & Ashton Davis

**In attendance**: Mark Sellers-Vaughn, Brian Robertson, Devin McGreal, Ashton Davis, Alyn Spector, Kary Burin, Phillip Hensyel, Monica Cowlishaw, Brian Cunnington, Carolyn Stone, Chris Robbins, Eric Wood, Kevin Connell, Linda Offerdahl, Mike Parvinen, Bruce Folsom, Abbie Krebsbach, Garret Senger, Andrew Rector – WUTC, Nicholas Columbo – OPUC, Mike Paruszkiewicz – NWN, Chad Stokes – Cable Huston, Marty Saldivar – NWP, Mark Iverson – Ruby, Corey Dahl – Public Counsel

**Minutes:** Carolyn Stone

Brian began the meeting with a Safety Moment asking if we all know the exits to our home offices in the event of an emergency. Brian also reminded everyone that we are abiding by the CDC guidelines regarding COVID 19 and went through introductions.

Brian went through the Agenda for the meeting and introduced Bruce Folsom by stating that he brings industrial knowledge and helped them build the IRP and helped the Resource Planning team understand the dynamics of the industry – kudos to Bruce for his expertise!

Bruce thanked Brian and gave the group a bit of his background. He was in the regulatory world at WUTC, then went into Energy Efficiency and IRP’s. At Avista, he was in regulatory for 13 years, then moved into Energy Efficiency. For the last 4 years he has been a part time consultant and said it is a pleasure working with Cascade!

**Presentation #1 – A LITTLE HISTORY LESSON** (Mark Sellers-Vaughn)

**Presentation #2 – PURPOSE OF THE IRP** (Brian Robertson)

**Presentation #3 – IRP PROCESS** (Brian Robertson)

* Brian said that after TAG #2, the load forecast was the milestone used to feed the avoid cost calculation and for energy efficiency needs.
* Each step feeds a step in the process and get feedback locked in early, but it is OK to give feedback later in the process as well!

**Question**: Andrew asked if they could go back to the stakeholder document and...in lieu of the new social distancing practices, does this document need changing?

**Answer**: Brian said they put together the stakeholder document thinking we would be having face to face meetings. Brian said he will look back at this document to see if there is anything regarding the “reasonable accommodation – meeting locations” section – this may fall into the type of item you are discussing.

* Mark added that it is important to recognized, that they favor “face to face” meetings, but the process is designed for either way. He said they don’t foresee anything creating conflicts or delays. The process should produce the same quality IRP, as with normal standards.
* Andrew added that he wasn’t sure if the current situation changes things. Brian thanked Andrew for his feedback!

**Presentation #4** – **BEST PRACTICES DISCUSSION** (Brian Robertson)

*Validation of Methods*

* Brian askes what Staff had in mind for validation methods.
* We are keeping Appendix L in the IRP (pros/cons of models and methodologies).
* Improving models – We are using SENDOUT®, but we have reached out to another company to replace SENDOUT®.
* Brian said his question to Andrew is, are you looking for more?

**Question**: Andrew asked about replacing SENDOUT®, you’re looking into another software?

**Answer**: Brian said “Yes, we are in discussions with them”. However, the vendor is not at the point where SENDOUT® is now. They are doing a test trail this summer and will move on from there.

**Question**: Andrew stated that since CNGC’s last IRP, there are significant and beneficial changes to the modeling process. He asked, “Are those working as expected?”

**Answer**: Brian asked, in reply, if Andrew was asking about specific types of changes to optimization or resource integration or the Load forecast/Avoided Cost calculations?

 Andrew specified the “Stochastic Model – Cholesky Matrix”. He said he will look and see if there were others and forward ideas.

 Brian thanked Andrew and said that was helpful!

**Slide #24** – **Recommendations (cont’d)**

* Brian brought up the recommended improvements to the Greenhouse Gas (GHG) modeling. They are using the social cost of carbon with a 3% discount rate. In Section 15 of the IRP there is mention of a 2.5% discount rate? Brian asks if WUTC would rather use 2.5% rather than 3%?
* Andrew replied “Yes”, 2.5%.

**Slide #25** – **Recommendations (cont’d)**

*Modeling of Significant Emergency Events*

* Gas structure in BC in October 2018 - In the past we limit gas that we get from Alberta & Rockies to imitate this event – can’t model all elements of emergency.
* Should we put in more narrative about the scenarios where we limit gas or can’t get gas...?
* Andrew said put more narrative in, not much there around the scenarios...the biggest way to address this. Show what the impact is if/when the event happens...and what the unserved demand would be.
* Brian asked if anyone else would like to add to this? There was no further comment.

**Presentation #5** – **REGIONAL MARKET OUTLOOK** (Ashton Davis)

* Ashton started with a “snapshot of the region”.
* As far as COVID 19’s impact – analysts agree to “wait & see”, looking for clarity and we need more data. CNGC continues to monitor.

**Question**: Dan Kirschner asked about “anecdotal evidence”?

**Answer**: Brian said they attended a WBI conference and it was brought up after that weather normalization demand is down 1-3%. More on electric side, no evidence on the gas side.

Ashton said they are doing demand forecast analysis right now so will provide more information.

**Presentation #6** – **KEY IRP DISCUSSIONS FOR FUTURE IRP MEETINGS** (Ashton Davis)

* Ashton started by stating that they really need feedback!

**Question**: Andrew had 2 questions:

1. Remind me when the PGA filings take place?
2. Jordan Cove, what is the involvement?

**Answer:** Ashton said that the PGA filings are in late summer early fall. Mike Parvinen stated that the filing is done by October 1 – Nov 1. They file 2 weeks early, but it is effective November 1 in both states. As far as Jordan Cove, Ashton stated that they are just monitoring that to see how it impacts the region – no monetary involvement.

**Slide #33** - **Load Forecast**

* Ashton explained that this slide shows their primary drivers
* In TAG #2, we will dig into the results.
* We use a dynamic regression model
* They use a 60-degree HDD and ARIMA
* Scenarios high/low growth & stochastic analysis

**Slide #34** – **Customer Forecast**

* Customer forecast
* Model Notes – Citygate by class

**Slide #35** – **Use per Customer Forecast**

* Regression on HDD’s, Wind & use ARIMA
* Therms per customer

Ashton ended asking if there were any further questions on his presentation? There were none.

**Slide #36** – **Hedging** (Devin McGreal)

* Docket UG #132019
* On 9/12/2019 CNGC filed 2019 Annual Hedge Plan. Plan was acknowledged on 3/17/2020.
* Devin said we have other needs that other utilities do not have... different regulatory needs
* We are willing to look at utilities individually
* 2020 Annual Hedge Plan will be filed on or before 7/23/2020.
* Mark said the 2020 Annual Hedge Plan draft will be **READY** on 7/23 for management to review. Devin said that is correct.

**Slide #37** - **Avoided Cost**

* Finding regional diversities...
	+ New 1 – incorporating value for impact of Peak Hour used in conjunction with distribution system values & savings that occur.
	+ New 2 – Capacity risk premium value – Theoretical value to be hedged – if purely hedged! Tested 2 years ago and included in OPUC IRP....value comes up negative – high premium. Could be zero again.

**Question**: Andrew asked if UM 1893 is annually looked at, avoided cost numbers?

**Answer**: Devin replied that it is an annual process. The utilities come together and use inputs. These regional utilities say what the inputs will be.

**Question:** Andrew asked if it is a “Single Rule” used in calculation?

**Answer**:

1. Capital distribution system costs - $ invested.
2. Hourly modification looks at actual flows on cold days...i.e. how much more gas flowed on cold days. How much more on the coldest hour vs the average hour – this is important on distribution costs.

Andrew said he understand the concept and will wait for the TAG on avoided costs. Devin offered to give Andrew this information before that TAG meeting.

**Slide #39** – **Energy Efficiency** (Monica Cowlishaw)

* Updates play into the IRP
* CPA approved by submission – February.
* There will be more on energy efficiency in a later TAG meeting.

**Question**: Andrew said he hasn’t looked at what is planned for tomorrow yet....

**Answer**: Monica said there will be CPA and COVID update...we can dig into more tomorrow. Devin said resource planning will be attending!

**Slide #40** – **Carbon** (Devin McGreal)

* Internal discussion on SB 5116, social cost of carbon as primary carbon forecast.
* WUTC uses a 3%, for 2.5% we have no qualms about that. He asked if there were any other opinions, from the group about the discount rate?
* Monica said, there are some calculations on custom projects on community projects – custom to be updated later.
* Corey said the main concern is the consistency across utilities. They are comfortable in moving forward incorporating social cost of carbon.

**Slide #41** – **Environmental Policy** (Abby Krebsbach)

* We provide regulatory interpretation and policy review as best we can. We are in North Dakota but reaching out virtually. Nothing replaces being “on the ground”. We are looking forward to getting back out in the field. There are 6 employees’ and we value “all boots” on the ground.

**Slide #42** – **Renewables (RNG)** (Brian Cunnington)

* Brian stated that they will have to get everyone involved in business development, regulatory in phone calling...about renewable natural gas. In the CNGC territory we are working closely with CNGC Gas Supply. How would we purchase it? We are working closely with Resource Planning at how it will be managed going forward. Continuously changing legislation on RNG and businesses in Washington, Oregon. On #2, there is a correction – lots of inquiries about RNG, but since the COVID 19 pandemic, there have been no new inquiries. Do we buy? Do they put gas on our system and sell it to industrial customers? We are looking at 4 good projects right now...putting gas into our distribution system. We are still in the discussion mode. We are going to conferences, keeping a finger on the pulse of RNG and what that looks like in the Pacific Northwest.
* We are monitoring HB 1257 in Washington and SB98 in Oregon. Other districts are going and keeping up.
* There will be more discussion as the year goes on... on methodologies and more to share down the road.
* Brian asked if there were any further questions?

**Question**: Andrew asked when the next RNG conference is?

**Answer**: Brian C said that the Western Energy meetings have one for RNG, brings utilities together to discuss and share. Alyn will be monitoring a session tomorrow AM...a virtual meeting. Andrew said he hopes it goes well. He will look at the website to view.

**Slide #43** – **Distribution System Planning** (Linda Offerdahl)

* In 2020 IRP included methodology on planning
* We encourage feedback!
* The planning processes and methodology will be in June at TAG #3.

**Slide #44** – **Stochastic Analysis** (Devin McGreal)

* The more stochastic analysis - we are on the ball with that!
* We use the lowest unserved/lowest cost. Should be done on all portfolios for risk management. Monte Carlo simulations will be done on all portfolios.

**Question**: Andrew asked what the thinking in Step #5 was (using the MAP) as in the 2018 IRP?

**Answer**: Devin said no, step #2 or #3 we start the ranking process. We are robust in how we are ranking the portfolios. Andrew said will it interested in hearing more about this later. Devin said “Absolutely!”

* Devin went on to explain that using multiple portfolios adds extrinsic value and shows resiliency.
* Once the candidate portfolio is selected, we do more testing. Not to “harp” but when we are doing this modeling it is important **not** to prescribe a certain “event” to modeling. If an unknown event happens, we position ourselves properly – I’m hesitant to call it a certain event. For example, events limiting storage...we try not to get too specific!
* Regarding the feedback from Andrew we received about extreme events. We can talk about what the impact is to cost or unserved demand. Scenario could be if contracts have no “evergreen” provision, for example.
* Devin asked if there were more questions about this?
* Andrew added that, it is understandable where you’re coming from, and he is OK with that. It is not necessary to say you’re modeling the Enbridge incident, but should show the impact in the narrative.
* Devin replied “Exactly” and asked if there were more questions.

**Slide #46** – **2020 IRP Schedule** (Brian Robertson)

* Brian thanked everyone for presenting. Hopefully, he said, we can meet faced to face in the future. He went over the schedule as follows:

 TAG #2 - Demand Forecast

 TAG #3 - June 24 – Distribution System Planning (SeaTac conference center)

 TAG #4- August 6

 TAG #5- September 23 – integration results, new 4-year action plan

 NOV 17- Draft distributed

 JAN 27- 6th TAG meeting if necessary

 FEB 26, 2021 Filing in Washington

* Brian asked if there were questions on the timeline or on anything else?
* Brian thanked everyone for their attendance!
* If there are no questions now, Brian said, thing about it and if you have them later, contact us.

**The Meeting was Adjourned**